



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,222	11/21/2001	Robert M. Davis	2760-047	7918

7590 05/19/2004

MICHAEL H. JESTER  
A PROFESSIONAL LAW CORPORATION  
505D GRAND CARIBE CAUSEWAY  
CORONADO, CA 92118-3303

EXAMINER

MILLER, JONATHAN R

ART UNIT	PAPER NUMBER
----------	--------------

3653

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/044,222

Applicant(s)

DAVIS, ROBERT M.

Examiner

Jonathan R. Miller

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-19, 21, 22, 24-26 and 28-30 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 23 and 27 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-19, 21, 22, 24-26, and 28 – 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Bielagus ('388). The reference discloses a first frame; a first disc screen section including a plurality of laterally extending first shafts rotatably mounted in the first frame and spaced along a longitudinal conveying direction, first drive means for rotating the first shafts, and a plurality of first discs mounted on the first shafts, the first discs being dimensioned, configured and spaced for classifying a stream of mixed recyclable materials deposited onto the first discs as the first discs are rotated by the first drive means to convey a first portion of the stream along the conveying direction to a first end of the first disc screen section, a second frame positioned adjacent to the first frame; a second disc screen section having a first end immediately adjacent to the first end of the first disc screen section and including a plurality of laterally extending second shafts rotatably mounted in the second frame and spaced along the longitudinal conveying direction, second drive means for rotating the second shafts, and a plurality of second discs mounted on the second shafts, the second discs being dimensioned, configured and spaced for classifying the first portion of the stream of mixed recyclable materials deposited onto the second discs from the first disc screen section as the second discs are rotated by the second drive means to convey a second portion of the stream along the conveying direction; and means for

Art Unit: 3653

selectively adjusting a second angle of inclination of the second disc screen section relative to the first disc screen section without changing a first angle of inclination of the first disc screen section (Fig. 1, and col. 5, lines 3+).

2. With regards to claim 2, the reference further discloses means for pivotally connecting the second frame to the first frame (Fig. 1).

3. With regards to claim 3, the reference further inherently discloses the means for selectively adjusting the second angle of inclination of the second disc screen section includes a hydraulic cylinder.

4. With regards to claim 6, the reference further discloses a stand for supporting the first and second frames (Fig. 1).

5. With regards to claim 7, the reference further inherently discloses the frames are formed of steel plates (Fig. 1; col. 3, lines 26+).

6. With regards to claim 8, the reference further discloses the first and second disc screen sections are positioned end-to-end to form a single continuous classifying deck (Fig. 1).

7. With regards to claim 9, the reference further discloses the first and second drive means share a common motor and drive linkage (col. 3, lines 33+).

8. With regards to claim 10, the reference further discloses the means for pivotally connecting the second frame to the first frame includes an uppermost one of the first shafts (Fig. 1).

9. With regards to claim 11, the reference further discloses a single continuous disc screen having first and second sections positioned end-to-end and including a plurality of laterally extending shafts, a plurality of discs mounted on the shafts and means for rotating the shafts in a

common direction so that the discs will classify mixed recyclable materials deposited onto the discs and convey a portion of the materials along a conveying direction, and means for adjusting an angle of inclination of the second section relative to the first section (Fig. 1, col. 5, lines 3+).

10. With regards to claim 12, the reference further discloses a first frame for rotatably supporting a first portion of the shafts included in the first section and a second frame for rotatably supporting a second portion of the shafts included in the second section, and means for mounting the second frame for pivotal rotation relative to the first frame (Fig. 1, col. 5, lines 3+).

11. With regards to claim 13, the reference further discloses the mounting means includes a shaft of the first section (Fig. 1)

12. With regards to claim 14, the reference further inherently discloses the means for adjusting the angle of inclination includes a hydraulic cylinder.

13. With regards to claim 15, the reference further discloses a stand that supports the first and second frames (Fig. 1).

14. With regards to claim 16, the reference further discloses the first and second sections have a generally planar configuration (Fig. 1).

15. With regards to claim 17, the reference further discloses the second section has more shafts than the first section (Fig. 1, with the pivot shaft included in the second section).

16. With regards to claim 18, the reference further discloses the second section can be pivoted so that the first and second sections form a single planar disc screen (Fig. 1)

Art Unit: 3653

17. With regards to claim 19, the reference further discloses the shafts of the first section are rotated by a first drive means and the shafts of the second section are rotated by a separate second drive means (col. 3, lines 33+).

18. With regards to claim 21, the reference further discloses a disc screen including a plurality of interleaved discs supported on parallel shafts spaced along a conveying direction, a first frame rotatably supporting a first portion of the shafts to define a first section of the disc screen, a second frame rotatably supporting a second portion of the shafts to define a second section of the disc screen, and means for pivotally mounting the second frame to the first frame; at least one drive and drive linkage that rotates the shafts; the discs having an outer contour shaped for agitating materials deposited onto the disc screen and for carrying at least a portion of the materials along the conveying direction when the discs are rotated in a common predetermined direction by the drive and drive linkage; and means for selectively adjusting an angle of inclination of the second section of the disc screen relative to the first section of the disc screen in order to improve the separation of materials deposited onto the disc screen (Fig. 1, col. 5, lines 3+).

19. With regards to claim 22, the reference further discloses the first frame and the second frame are carried by a stand (Fig. 1).

20. With regards to claim 24, the reference further discloses the first section is fixed and the second section articulates relative to the first section via the selective adjusting means (Fig. 1).

21. With regards to claim 26, the reference further discloses the first section extends at a predetermined fixed inclination and the second section is pivotal relative to the first section via the selective adjusting means (Fig. 1).

Art Unit: 3653

22. With regards to claim 28, the reference further discloses the first and second sections are positioned end-to-end to form a single continuous classifying deck (Fig. 1).

23. With regards to claim 29, the reference further discloses the discs of the first and second sections are rotated by a common motor and drive linkage (col. 3, lines 33+).

24. With regards to claim 30, the reference further discloses the means for pivotally mounting the second frame to the first frame includes a shaft of the first section (Fig. 1, with the pivot shaft designated as in the first section).

*Allowable Subject Matter*

25. Claims 4, 5, 23 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

26. Claim 20 is allowed.

*Conclusion*

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 3653


however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan R. Miller whose telephone number is (703) 305-5778. The examiner can normally be reached on M-F: 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (703) 306-4173. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jrm

  
DONALD P. WALSH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600